Atty. Dkt. No.: IP-0018-US (830-0018US1)

IN THE UNITED STATES OFFICE OF PATENTS AND TRADEMARKS

Applicant:

John A. Moon

Group No.: 1743

Serial No.:

10/661,836

Filed:

September 12, 2003

Examiner: Hyun, Paul Sang Hwa

For:

METHOD AND APPARATUS FOR ALIGNING MICROBEADS IN ORDER TO INTERROGATE

THE SAME

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 - (320) unattached US references
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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: John A. Moon

Art Unit: 1743

Serial No.: 10/661,836

Examiner: Hyun, Paul Sang Hwa

Filed: September 12, 2003

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For: METHOD AND APPARATUS FOR

ALIGNING MICROBEADS IN ORDER

TO INTERROGATE THE SAME

INFORMATION DISCLOSURE STATEMENT TRANSMITTAL

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Sir:

The following are submitted in the above application in compliance with 37 CFR 1.97 and 37 CFR 1.98.

This paper is submitted in accordance with:

2.	37 CFR 1.97(b): [within three months of national, non-CPA filing, prior to first	Office
	Action, on the merits, or prior to first office action after filing an RCE].	

09/13/2007 HLE333 00000002 10661836

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⊠ 3.		R 1.97(c): [before Final Office ution, whichever is earlier]; an	Action, Allowance, or other action closing ad
		The required Certification materials The \$180.00 fee specified in Disclosure Statement is authorized.	37 CFR 1.17(p) for submission of this Information
4.	37 CF	R 1.97(d): [on or before issue	fee payment]; and
	☐ a. ☐ b.	The required Certification is The \$180.00 fee specified in Disclosure Statement is author	37 C.F.R. 1.17(p) for submission of this Information
<u></u>	Certifi	cation	
	☐ a.	communication from a foreig	tained in this Statement was first cited in any in patent office in a counterpart foreign patent ee months prior to the filing of this Statement; or
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This d	ocumen	t is submitted in duplicate.	Respectfully Submitted,
			Clam Z mas
			Dean D. Small Reg. No. 34,730 THE SMALL PATENT LAW GROUP LLP 611 Olive Street, Suite 1611 St. Louis, Missouri 63101 (314) 584-4080

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Complete if Known for form 1440/PTO Application Number 10/661,836 Filing Date September 12, 2003 First Named Inventor John Moon INFORMATION DISCLOSURE STATEMENT BY APPLICANT Art Unit 1743 (Use as many sheets as necessary) Examiner Name Hyun, Paul Sang Hwa Attorney Docket Number IP-0018-US (830-0018US1)

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Sheet

Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevan Passages or Relevant figures Appear
iiillais	INU.	Number-Kind Code ^{2 (if known)}			
	A1	3891302	Jun-75	Dabby et al.	
	A2	3916182	Oct-75	Dabby et al	
	A3	3968476	Jul-76	McMahon	
	A4	4011435	Mar-77	Phelps	
	A5	4023010	May-77	Horst et al	
	A6	4053228	Oct-77	Schiller	
	A7	4131337	Dec-78	Moraw et al	
	A8	4168146	Sep-79	Grubb et al	
	A9	4301139	Nov-81	Feingers et al	
	A10	4386274	May-83	Altshuler	
	A11	3891302	Jun-75	Dabby et al.	
	A12	3916182	Oct-75	Dabby et al	
-	A13	3968476	Jul-76	McMahon	
	A14	4445229	Apr-84	Tasto et al	
	A15	4447546	May-84	Hirschfeld	
	A16	4560881	Dec-85	Briggs	
	A17	4562157	Dec-85	Lowe et al	
	A18	4647544	Mar-87	Nicoli et al	
·	A19	4678752	Jul-87	Thorne et al	
	A20	4685480	Aug-87	Eck	
-	A21	4690907	Sep-87	Hibino et al	
	A22	4716121	Dec-87	Block et al	
	A23	4725110	Feb-88	Glenn et al.	
	A24	4740468	Apr-88	Weng et al	
	A25	4740688	Apr-88	Edwards	
	A26	4748110	May-88	Paul	
	A27	4767719	Aug-88	Finlan	
	A28	4807950	Feb-89	Glenn et al.	
	A29	4816659	Mar-89	Bianco et al	
	A30	4841140	Jun-89	Sullivan et al	

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Substitute for for	m 1440/PTO			Complete if Known		
	111 1440/F10			Application Number	10/661,836	
				Filing Date	September 12, 2003	
INFORMA	TION DISCL	OSURE ST	ATEMENT	First Named Inventor	John Moon	
	BY APP			Art Unit	1743	
1	(Use as many she	ets as necessary))	Examiner Name	Hyun, Paul Sang Hwa	
				Attorney Docket Number	IP-0018-US (830-0018US1)	
Sheet	2	of	16			

Examiner Initials*	Cite No. ¹	Document Number Number-Kind Code ^{z (if}	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant figures Appear
	B1	4877747	Oct-89	Stewart	
	B2	4880752	Nov-89	Keck et al	
	В3	4882288	Nov-89	North et al	
	B4	4921805	May-90	Gebeyehu et al	
	B5	4931384	Jun-90	Layton et al	
	B6	4937048	Jun 26, 1990	Masahiko, Sakai, etal	
	B7	4958376	Sep-90	Leib	
	B8	4992385	Feb-91	Godfrey	
	B9	5003600	Mar-91	Deason	
	B10	5030558	Jul-91	Litman et al	
	B11	5033826	Jul-91	Kolner	
	B12	5065008	Nov 12, 1991	Hakamata, Kazuo, etal	
	B13	5067155	Nov-91	Bianco et al	
	B14	5081012	Jan-92	Flanagan et al	
	B15	5089387	Feb-92	Tsay et al	
	B16	5090807	Feb-92	Tai	
<u>-</u>	B17	5095194	Mar-92	Barbanell	
	B18	5100238	Mar-92	Nailor et al	
	B19	5104209	Apr-92	Hill et al.	
	B20	5115121	May-92	Bianco et al	
	B21	5118608	Jun-92	Layton et al	
	B22	5129974	Jul 14, 1992	Aurenius, Carl A.D.	
	B23	5138468	Aug-92	Barbanell	
	B24	5141848	Aug-92	Donovan et al	
	B25	5144461	Sep-92	Horan	
	B26	5166813	Nov-92	Metz	
	B27	5192980	Mar 9, 1993	Dixon, Arthur E., etal	
	B28	5196350	Mar-93	Backman et al	
	B29	5200794	Apr-93	Nishiguma et al	
	B30	5218594	Jun-93	Tanno, Naohiro	

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Signature	Date	
Signature	Considered	
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				Attorney Docket Number	IP-0018-US (830-0018US1)	
Sheet	3	of	16			

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	C1	5291006	Mar-94	Nishiguma et al	
	C2	5291027	Mar-94	Kita et al	
	C3	5300764	Apr-94	Hoshino et al	
	C4	5307332	Apr-94	Tinet	
	C5	5310686	May-94	Sawyers et al	
	C6	5342790	Aug-94	Levine et al	
	C7	5349442	Sep-94	Deason et al	
	C8	5352582	Oct-94	Lichtenwalter et al	
	C9	5364797	Nov-94	Olson et al	
	C10	5367588	Nov-94	Hill et al.	
	CH	5372783	Dec-94	Lackie	
	C12	5374816	Dec-94	Bianco	
	C13	5374818	Dec-94	Bianco et al	
	C14	5388173	Feb-95	Glenn	
	C15	5394234	Feb-95	Bianco et al	
	C16	5395558	May-02	Duveneck	
	C17	5426297	Jun-95	Dunphy et al.	
	C18	5442433	Aug-95	Hoshino et al	
	C19	5448659	Sep-95	Tsutsui et al	
	C20	5451528	Sep-95	Raymoure et al	
	C21	5455178	Oct-95	Fattinger	
	C22	5461475	Oct-95	Lerner et al	
	C23	5465176	Nov-95	Bianco et al	
	C24	5468649	Nov-95	Shah et al	
	C25	5506674	Apr-96	Inoue et al	
	C26	5514785	May-96	Van Ness et al	
	C27	5528045	Jun-96	Hoffman et al	
	C28	5547849	Aug-96	Baer et al	
	C29	5559613	Sep-96	Deveaud-Pledran et al.	
	C30	5585639	Dec-96	Dorsal et al	
	C31	5587832	12/24/1996	Krause, Andrew W.	
	C32	5607188	Mar-97	Bahns et al	

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Substitute for form 1440/PTO				Application Number	10/661,836	
				Filing Date	September 12, 2003	
INFORMA	TION DISCL	OSURE ST	ATEMENT	First Named Inventor	John Moon	
		LICANT	•	Art Unit	1743	
1	(Use as many sheets as necessary)			Examiner Name	Hyun, Paul Sang Hwa	
				Attorney Docket Number	IP-0018-US (830-0018US1)	
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	D1	5291006	Mar-94	Nishiguma et al	
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	D12	5374816	Dec-94	Bianco	
	D13	5374818	Dec-94	Bianco et al	
	D14	5388173	Feb-95	Glenn	
	D15	5394234	Feb-95	Bianco et al	
	D16	5395558	May-02	Duveneck	
	D17	5426297	Jun-95	Dunphy et al.	
	D18	5442433	Aug-95	Hoshino et al	
	D19	5448659	Sep-95	Tsutsui et al	
	D20	5451528	Sep-95	Raymoure et al	
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	D22	5461475	Oct-95	Lerner et al	
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	D25	5506674	Apr-96	Inoue et al	
	D26	5514785	May-96	Van Ness et al	
	D27	5528045	Jun-96	Hoffman et al	
	D28	5547849	Aug-96	Baer et al	
	D29	5559613	Sep-96	Deveaud-Pledran et al.	
	D30	5585639	Dec-96	Dorsal et al	
	D31	5587832	12/24/1996	Krause, Andrew W.	
	D32	5607188	Mar-97	Bahns et al	

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Substitute for fo	substitute for form 1440/PTO			Complete if Known		
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	INFORMATION DISCLOSURE STATEMENT			Filing Date	September 12, 2003	
INFORMA				First Named Inventor	John Moon	
	BY APP			Art Unit	1743	
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	E1	5621515	Apr-97	Hoshino	
	E2	5624850	Apr-97	Kumar et al	
	E3	5625472	Apr-97	Mizrahi et al.	
	E4	5627040	May-97	Bierre et al	
	E5	5627663	May-97	Horan et al	
	E6	5633724	May-97	King et al	
	E7	5663790	Sep-97	Ekstrom et al	
	E8	5667976	Sep-97	Van Ness et al	
	E9	5671308	Sep-97	Inoue et al	
	E10	5712912	Jan-98	Tomko et al	
	E11	5721435	Feb-98	Troll	
	E12	5729365	Mar-98	Sweatt	
	E13	5736330	Apr-98	Fulton	
	E14	5742432	Apr-98	Bianco	
	E15	5745617	Apr-98	Starodubov et al.	
	E16	5759778	Jun-98	Li et al	
	E17	5760961	Jun-98	Tompkin et al	
	E18	5766956	Jun-98	Groger et al	
	E19	5776694	Jul-98	Sheiness et al	
	E20	5793502	Aug-98	Bianco et al	
	E21	5798273	Aug-98	Shuler et al	
	E22	5799231	Aug-98	Gates et al	
	E23	5801857	Sep-98	Heckenkamp et al	
	E24	5804384	Sep-98	Muller et al	
	E25	5812272	Sep 22, 1998	Hewlett-Packard Co.	
	E26	5822472	Oct-98	Danielzik et al	
	E27	5824478	Oct-98	Muller	
	E28	5824557	Oct-98	Burke et al	
****	E29	5831698	Nov-98	Depp et al	
· ·	E30	5837475	Nov-98	Dorsal et al	
	E31	5841555	Nov-98	Bianco et al	
	E32	5846737	Dec-98	Kang	

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Sheet	6	of	16			

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	F1	5874187	Feb-99	Colvin et al	
	F2	5895750	Apr-99	Mushahwar et al	
	F3	5922550	Jul-99	Everhart et al	
	F4	5925562	Jul-99	Nova et al	
	F5	5925878	Jul-99	Challener	
	F6	5945679	Aug-99	Dorsal et al	
	F7	5972542	Oct-99	Starodubov	
	F8	5976896	Nov-99	Kumar et al	
	F9	5981166	Nov-99	Mandecki	
	F10	5986838	Nov-99	Thomas, III	
	F11	5989923	Nov-99	Lowe et al	
	F12	5998796	Dec-99	Liu et al	
	F13	6001510	Dec-99	Meng et al	
	F14	6017754	Jan-00	Chesnut et al	
	F15	6025129	Feb-00	Feb-00 Nova et al	
	F16	6025283	Feb-00	Roberts	
	F17	6036807	Mar-00	Brongers	
	F18	6043880	Mar-00	Andrews et al	
	F19	6046925	Apr-00	Tsien et al	
	F20	6049727	Apr-00	Crothall	
	F21	6057107	May-00	Fulton	
	F22	6060256	May-00	Everhart et al	
	F23	6067167	May-00	Atkinson et al	
	F24	6067392	May-00	Wakami et al	
	F25	6078048	Jun-00	Stevens et al	
	F26	6084995	Jul-00	Clements et al.	
	F27	6087186	Jul-00	Cargill et al	
	F28	6096496	Aug-00	Frankel et al	

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Substitute for for	Substitute for form 1440/PTO		Complete if Known		
Substitute for for	11 1440/F10			Application Number	10/661,836
				Filing Date	September 12, 2003
INFORMA	INFORMATION DISCLOSURE STATEMENT			First Named Inventor	John Moon
		LICANT		Art Unit	1743
-	(Use as many she	ets as necessarj	"	Examiner Name	Hyun, Paul Sang Hwa
		Attorney Docket Number	IP-0018-US (830-0018US1)		
Sheet	7	of	16		

Examiner Initials*	Cite No. ¹	Document Number Number-Kind Code ^{2 (II}	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant figures Appear
	G1	6096596	Aug-00	Gonzalez	
	G2	6097485	Aug-00	Lievan	
	G3	6103535	Aug-00	Pilevar et al	
	G4	6118127	Sep-00	Liu et al	
	G5	6128077	Oct-00	Jovin et al	
	G6	6137931	Oct-00	Ishikawa et al.	
	G7	6143247	Nov-00	Sheppard	
	G8	6156501	Dec-00	McGall et al.	
	G9	6160240	Dec-00	Momma et al	
	G10	6160656	Dec-00	Mossberg et al	
	G11	6164548	Dec-00	Curiel	
	G12	6165592	Dec-00	Berger et al	
	G13	6165648	Dec-00		
	G14	6194563	Feb-01	Cruickshank	
	G15	6204969	Mar-01	Jang	
	G16	6218194	Apr-01	Lyndin et al	
	G17	6221579	Apr-01	Everhart et al	
	G18	6229635	May-01	Wulf	
	G19	6229827	May-01	Fernald et al.	
	G20	6229941	May-01	Yoon et al.	
	G21	6259450	Jul-01	Chiabrera et al	
	G22	6268128	Jul-01	Collins et al	
	G23	6277628	Aug-01	Johann et al	
	G24	6284459	Sep-01	Nova et al	

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	H1	6285806	Sep-01	Kersey et al.	
	H2	6288220	Sep-01	Kambara et al	
	Н3	6292282	Sep-01	Mossberg et al	
	H4	6292319	Sep-01	Thomas, III	
	H5	6301047	Oct-01	Hoshino et al	
	Н6	6304263	Oct-01	Chiabrera et al	
	H7	6306587	Oct-01	Royer et al	
	Н8	6309601	Oct-01	Juncosa et al	
	H9	6312961	Nov-01	Voirin et al	
	H10	6313771	Nov-01	Munroe et al	
	H11	6314220	Nov-01	Mossberg et al	
	H12	6319668	Nov-01	Nova et al	
	H13	6322932	Nov-01	Colvin et al	
	H14	6329963	Dec-01	Chiabrera et al	
	H15	6331273	Dec-01	Nova et al	
	H16	6340588	Jan-02	Nova et al	
	H17	6352854	Mar-02	Nova et al	
	H18	6355198	Mar-02	Kim et al	
	H19	6356681	Mar-02	Chen et al.	
	H20	6361958	Mar-02	Shieh et al	
	H21	6363097	Mar-02	Linke et al.	
	H22	6371370	Apr-02	Sadler	
	H23	6372428	Apr-02	Nova et al	
	H24	6391562	May-02	Kambara et al	

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	H	6395558	May 28, 2002	Duveneck, G. L., etal	
	I2	6399295	Jun-02	Kaylor et al	
	I3	6399935	Jun-02	Jovin et al	
	I 4	6403320	Jun-02	Read et al.	
	15	6406841	Jun-02	Lee et al	
	16	6406848	Jun-02	Bridgham et al	
	17	6416714	Jul-02	Nova et al	
	18	6416952	Jul-02	Pirrung et al.	
	19	6417010	Jul-02	Cargill et al	
	110	6428707	Aug-02	Berg et al	
	111	6428957	Aug-02	Delenstarr	
	I12	6429022	Aug 6, 2002	Kunz, R., etal	·
	I13	6433849	Aug-02	Lowe	
	I14	6436651	Aug-02	Everhart et al	
	115	6440667	Aug-02	Fodor et al.	
	116	6456762	Sep-02	Nishiki et al.	
	117	6462770	Oct-02	Cline	
	I18	6489606	Dec-02	Kersey et al	
	119	6496287	Dec-02	Seiberle et al	
	120	6506342	Jan-03	Frankel	
	I21	6515753	Feb-03	Maher et al	
	122	6522406	Feb-03	Rovira et al	
	123	6524793	Feb-03	Chandler et al	
	124	6533183	Mar-03	Aasmul	

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				Attorney Docket Number	IP-0018-US (830-0018US1)	
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Examiner Initials*	Cite No. ¹	Document Number Number-Kind Code ^{2 (if}	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Cotumns, Lines, Where Relevant Passages or Relevant figures Appear
	Jl	6544739	Apr-03	Fodor et al.	
	J2	6560017	May-03	Bianco	
	J3	6565770	May-03	Mayer et al	
	J4	6576424	Jun-03	Fodor et al.	
	J5	6592036	Jul-03	Sadler	
	J6	6594421	Jul-03	Johnson et al	
	J7	6609728	Aug-03	Voerman et al	
	J8	6613581	Sep-03	Wada et al	
	J9	6618342	Sep-03	Johnson et al	
	J10	6622916	Sep-03	Bianco	
	J11	6628439	Sep-03	Shiozawa et al	
	J12	6632655	Oct-03	Mehta et al	
	J13	6635470	Oct-03	Vann	
	J14	6635863	Oct-03	Nihommori et al	
	J15	6646243	Nov-03	Pirrung et al.	
	J16	6657758	Dec-03	Garner	
	J17	6678429	Jan-04	Mossberg et al	
	J18	6689316	Feb-04	Blyth et al	
	J19	6692031	Feb-04	McGrew	
	J20	6692912	Feb-04	Boles et al	
	J21	6982996	May-01	Bailey, T, etal	
	J22	7092160	Aug-06	Putnam et al	
	J23	7106513	Sep-06	Moon et al	
	J24	7126755	Oct-06	Moon et al	

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	K1	2002039732	Jan-02	Sebotini, David M.	
	K2	20020022273	Jul-02	Empedocles et al	
	K3	20020025534	Feb-02	Goh, M. C., etal	
	K4	20020034747	Mar-02	Bruchez	
	K5	20020039732	Apr-02	Bruchez	
	K6	20020074513	Jun-02	Abel, A. P., etal	
	K7	20020090650	Jul-02	Empedocles	
	K8	20030008323	Jan-03	Ravkin	
	K9	20030021003	Jan-03	Ono, Hroaki	
	K10	20030032203	Feb-03	Sabatini	
	K11	20030077038	Apr-03	Murashima	
	K12	20030129654	Jul-03	Ravkin	
	K13	20030138208	Jul-03	Pawlak	
	K14	20030184730	Apr-03	Murashima, K	
	K15	20040075907	Apr-04	Moon	
	K16	20040132205	Jul-04	Moon	
	K17	20040170356	Sep-04	lazikov	
	K18	20040175842	Sep-04	Roitman, D. B., etal	
	K19	20040209376	Oct-04	Natan, M. J., etal	
	K20	20040263923	Dec-04	Moon	
	K21	20050220408	Dec-05	Putnam et al	
	K22	20050227252	Feb 24, 2005	Sailor, M. J, etal	
	K23	20050270603	Dec-05	Putnam	
	K24	20060023310	Dec 8, 2005	Putnam, M. A., etal	

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	Ll	20060028727	Mar-06	Moon et al	
	L2	20060057729	Mar-06	Moon, J. A., etal	
	L3	20060063271	Mar 23, 2006	Putnam, M. A., etal	
	L4	20060071075	Apr 6, 2006	Moon, J. A., etal	
	L5	20060072177	Apr 6, 2006	Putnam, M. A., etal	
	L6	20060118630	Jun 8, 2006	Kersey, A. D., etal	
	L7	20060119913	Jun 8, 2006	Moon, J. A.	
	L8	20060132877	Jun 22, 2006	Kersey, A.	
	L9	20060134324	Jun 22, 2006	Putnam, M. A., etal	
	L10	20060139635	Jun 29, 2006	Kersey, A., etal	
	L11	20060160208	Jul 20, 2006	Putnam, M. A., etal	
	L12	20070121181	May-07	John Moon	
	L13	RE33581	Apr-91	Nicoli et al	
	L14	RE37473	Dec-01	Challener	
	L15	RE37891	Feb 17, 2004	Rosenstein, R. W.	
	L16	RE38430	Feb 17, 2004	Rosenstein, R. W.	
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		Country Code ³ -Number ⁴ -Kind Code ^{5 (if known)}				
	BB1	JP 08102544	16-Apr-96	Sato, yOICHI		
	BB2	GB 2 118 189	26-Oct-83	Shimadzu Corp		
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	BB4	GB 2 306 484	07-May-97	Univ Hertfordshire		
•	BB5	WO 05/079544 A2	01-Sep-05	Sirkis, J. S., et al		Ì
	BB6	WO 04/025563 A1	04-Mar-04	Moon, John, et al		
	BB7	WO 04/025561	25-Mar-04	Moon, J., et al		
-	BB8	WO 00/37914	01-Jun-00	Fernald, Mark R.		
	BB9	WO 99/32654	01-Jul-99	HItachi Chemical Co, LTD		
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	BB11	WO 97/015690	01-May-97	Curagen Corp.		
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	BB17	JP 01047950	22-Feb-89	Patent Abstracts of Japan		
	BB18	WO 06/020363 A2	23-Feb-06	Moon, J. A., et al		
	BB19	WO 99/42209	26-Aug-99	TAKEDA CHEMICAL INDUSTRIES, LTD.		
	BB20	WO 00/39617	01-Jul-00	Fernald, Mark R, et al.		
	BB21	WO 91/06496	16-May-91	Autotrol Corp		
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Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Cotumns, Lines, Where Relevant Passages or Relevant figures Appear
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